

REMARKS/ARGUMENTS

In view of the following remarks, and the amendments made to the claims, reconsideration of the application is respectfully requested. Applicant hereby specifically thanks the Examiner for indicating claims 5 – 7 and 11 – 14 as having allowable subject matter. In response, claim 6 has been rewritten in independent form to include all of the limitations of the base claim and any intervening claims. As such, Applicant respectfully submits that claim 6 should be clearly allowable, along with claim 7 dependent therefrom.

Claims 1 – 4, 9 and 10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Savkar et al (U.S. Patent No. 6,178,821) in view of Japanese Patent Document 4-325193, Meredith et al (U.S. Patent No. 2,442,308) or Geib et al (U.S. Patent No. 5,804,726).

Generally, the Savkar reference discloses a vibration sensing device including a strip bearing a pattern of markings. The strip moves back and forth across a sensor in order to determine the level of vibration in a machine such as a washing machine. As shown in Figure 5 of Savkar, a strip 10 is mounted for movement across sensing face 20. The sensor is mounted on a strut of a washing machine as shown in Figure 4.

The Examiner has suggested that each of the Japanese Document, Meredith et al and Geib et al recites a microphone and that it would be obvious to modify Savkar et al to include a microphone because “Savkar et al discloses ‘that any sensor that is capable of detecting a signal generated by movement’ may be employed (see col. 2, lines 46 and 47 and col. 3, lines 23 – 25).” Applicant respectfully submits that this is an incorrect characterization of Savkar et al. The actual wording of column 2, lines 46 and 47 is “The sensor is any sensor that is capable of detecting a signal generated by movement of the strip relative to the sensor, for example, a Hall sensor that detects perturbations in a magnetic field or an optical sensor such as that used to read bar codes.” The recitation in column 3, lines 23 – 25 states “Other sensors may be used in place of the Hall sensor, for

example, optical sensors, that can then be used with strips bearing non-magnetized markings. Additionally, the pattern of markings may be varied in orientation and geometric design.” Therefore, the Savkar et al reference does not suggest using any sensor that is capable of detecting a signal generated by noise, but rather any sensor that is able to detect motion of a flexible strip. Specifically, the reference suggests either an optical or a magnetic field type sensing arrangement would have to be employed to measure motion of such a strip. A microphone by its very nature does not measure the motion of a strip but rather measures sound. As such, a microphone would not measure such motion of a strip such that there is no suggestion to combine with Savkar et al any of the references applied in this rejection.

Additionally, some of the modifying references represent non-analogous art. Clearly none of the modifying U.S. references applied in this rejection is at all concerned with sensing either an unbalanced or pump starving condition employing a microphone. Rather Meredith et al is directed to a gyroscope in an aircraft and Geib relates to measuring gearing noise in a factory. Since Meredith et al. and Geib are directed to non-analogous art, it is respectfully submitted that it would not be obvious to combine them and the rejection should be withdrawn.

Dependent claims 2 – 4 and 10 are respectfully submitted to be allowable for the same reasons as the independent claims due to their dependency. However, it should be noted that these claims do have additional distinct features. For example, none of the prior art teaches to specifically locate a microphone on an outer tub of a washing machine as required by claim 2. Additionally, none of the references disclose a horizontal axis washing machine as required by claim 3 or detecting an unbalanced condition with a microphone as required by claims 4 and 10.

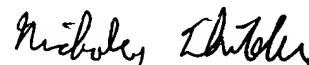
Claims 8 and 15 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art applied to claims 1 and 9 in further view of Huang (U.S. Patent 6,173,060). Once again, claims 8 and 15 are dependent claims and therefore should be considered allowable due to their dependency from claims 1 and 9 as discussed above. In

addition, it should be noted that the Huang reference is directed to a voice control timing and calculating device, in particular, a device for providing a more user friendly environment for visually disabled people. While it is true that the Huang reference does disclose using a voice command for a washing machine, as correctly noted by the Examiner. The Huang reference does not teach using a microphone for both detecting washing machine unbalance and voice control.

Dependent claims 5 and 11-14 are respectfully submitted to be allowable for the same reasons as the independent claims due to their dependency. Of course, as the Examiner has correctly pointed out, they also contain additional distinguishing limitations.

For the foregoing reasons, and the amendments to the claims, it is respectfully requested that the claims be allowed and the application expeditiously passed to issue. If the Examiner should have any additional concerns regarding the allowance of this application, he is cordially invited to contact the undersigned at the number provided below if it would further expedite the prosecution of the application.

Respectfully submitted,



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